

# DNA Purification Kits

**Plasmid DNA Purification Kit**  
**Genomic DNA Isolation Kit**  
**PCR Clean-up Kit**  
**DNA Gel Extraction Kit**  
**Mitochondrial/Cytoplasmic DNA Purification Kit**  
**Total RNA Purification Kit**  
**Parallel Genomic DNA and RNA Purification Kit**  
**Universal DNA Purification Kit**



## DNA/RNA Purification Kits

DNA and RNA Purification Kits offered by Bioron represent the complete line of kits suitable for the majority of applications. Almost all kits use innovative technique of **no-phenol-chlorophorm two-phase separation**, it provides the simplicity in use and highest quality of purified DNA or RNA.

### INNOVATIONS IN DNA PURIFICATION



- **No phenol, chlorophorm and ethidium bromide**
- **Unique two-phase system provides the superior purity of DNA**
- **Procedures can be completed in 30 - 60 min**
- **Available in 96-well plates and single centrifuge tubes formats**

The nucleic acid purification and analysis kits are **based on unique techniques** and provide **simple, easy and reproducible methods** to obtain high quality of DNA and RNA samples for scientists and clinical workers. All nucleic acid kits are produced and packed in **clean room** in order to avoid contamination with environmental DNA/RNA and DNase/RNase and the products are seriously inspected under quality control system to keep quality consistency. The producer passed its **ISO 9001** certification in May of 2004.

**BIORON** is proud to **provide the highest quality** of the products. In the future Bioron will do the best to present the widest selection of kits for DNA/RNA purification. Do not miss the possibility to use **new superior products and good service for a reasonable price!**



Plasmid DNA Purification Kit uses the traditional SDS/NaOH method with the subsequent absorption of plasmid DNA on silica membranes or beads. Additional purification of plasmid DNA (for Ultrapure and Endotoxin-free Kits) is based on the unique two-phase separation technique. This unique step provides purification of the plasmid DNA from LPS and all other contaminating substances. The purity and bio-compatibility of the plasmid DNA are superior to those obtained by two successive rounds of CsCl density gradient ultracentrifugation. Plasmid DNA purified with Endotoxin-free Ultrapure Plasmid DNA Purification Kit is free from endotoxin and suitable for all plasmid applications including eukaryotic transfection, DNA vaccination and gene therapy.

The entire procedure can be completed in 20-45 min.

**The kits for plasmid DNA purification are available in all popular formats:**

- mini-prep for purification of 5-20 µg of plasmid DNA;
- midi-prep for purification of 100 µg of plasmid DNA;
- maxi-prep for purification of 500 µg of plasmid DNA;
- 96-well plate for simultaneous purification of 96 samples, suitable for automatic applications.

**Find the most suitable Plasmid DNA purification kit for your applications:**

### Centrifuge tubes format

DNA Purification Kit	Mini-prep		Midi-prep		Maxi-prep	
	Cat#	Amount of preps	Cat#	Amount of preps	Cat#	Amount of preps
Rapid Plasmid DNA daily-prep Kit	V110110-05	50	V110111-10	10	V110112-10	10
	V110110-25	250	V110111-25	25	V110112-25	25
Ultrapure Plasmid DNA Purification Kit	V110120-05	50	V110121-10	10	V110122-05	5
			V110121-25	25		
Endotoxin-free Ultrapure Plasmid DNA Purification Kit	V110130-05	50	V110131-10	10	V110132-05	5

### 96-well plate format

DNA Purification Kit	Amount of plates	Cat#
96-easy Plasmid DNA Mini-Prep Kit	4 x 96 preps	V110153-04
	24 x 96 preps	V110153-24
Super-pure 96 Plasmid DNA Purification Kit	4 x 96 preps	V110163-04
	24 x 96 preps	V110163-24
96 BAC DNA Preparation Kit	4 x 96 preps	V110173-04
	16 x 96 preps	V110173-16

# DNA Purification Kits

## Genomic DNA Isolation Kits



Genomic DNA Mini-prep System provides an easy and rapid way to purify high quality genomic DNA from a variety of samples including blood, animal tissues, plant, cultured cells and bacterial cells. The purified DNA is suitable for PCR, Southern Blotting, apoptosis analysis, RAPD, AFLP or RFLP, but not suitable for DNA library construction.

Purification is based on the usage of the strong chaotropic agent which provides effective lysis of the

cells, denaturation of proteins and release of genomic DNA. An unique two-phase system is used for the additional purification of DNA. No phenol or chlorophorm is used. Approximately 20 µg of high-quality genomic DNA can be purified in one mini-prep.

Genomic DNA purification kits are available both in *centrifuge tubes* format and in *96-well* format.

After lysis of the cells, one mini-prep can be completed in 15-30 min, and 96-well preparation in one hour.

### Centrifuge tubes format

DNA Purification Kit	Sample size	Amount of preps	Cat#
Animal Tissue Genomic DNA Mini-prep Kit	1-20 mg	50	V110410-05
		250	V110410-25
Plant Genomic DNA Mini-prep Kit	2-240 mg	50	V110420-05
		250	V110420-25
Blood Cell / Cultured Cell Genomic DNA Mini-prep Kit	1-150 µl or 1x10 <sup>3</sup> -2x10 <sup>6</sup> cultured cells	50	V110430-05
		250	V110430-25
Whole Blood Genomic DNA Mini-prep Kit	up to 250 µl (12µg)	50	V110435-05
		250	V110435-25
Bacterial Genomic DNA Mini-prep Kit	1x10 <sup>9</sup> cells	50	V110440-05
		250	V110440-25
Body-fluid Viral DNA / Viral RNA Mini-prep Kit	50-250 µl	50	V110450-05
		250	V110450-25

### 96-well format

DNA Purification Kit	Sample size	Amount of 96-well plates	Cat#
96-well Blood Cell Genomic DNA Mini-prep Kit	100 µl	4	V110433-04
		24	V110433-24
96-well Bacterial Genomic DNA Mini-prep Kit	1x10 <sup>9</sup> cells	4	V110443-04
		24	V110443-24
96-well Body-fluid Viral DNA / Viral RNA Mini-prep Kit	50-200 µl	4	V110453-04
		24	V110453-24



## PCR Clean-up Kit

PCR Clean-up Kit is designed for rapid purification of DNA fragments after PCR. The kit provides effective removal of primers less than 50-mer, proteins and mononucleotides. No ethanol or isopropanol precipitation,

no phenol and chloroform extractions are required. Purification is based on the selective absorption of double-stranded DNA fragments (more than 50 bp) on silica membranes. 70-90% recovery guaranteed!

### Centrifuge tubes format

DNA Purification Kit	Amount of preps	Cat#
PCR Clean-up Kit	50	V110310-05
	250	V110310-25

### 96-well format

DNA Purification Kit	Amount of plates	Cat#
96-well PCR Clean-up Kit	4 x 96	V110313-04
	24 x 96	V110313-24



## DNA Gel Extraction Kit

DNA Gel Extraction Kit provides a rapid way to isolate DNA fragments from agarose gels. The recovery is 60-85%. In DNA Gel Extraction Kit, Buffer DE-A contains a DNA-protecting compound, which prevents DNA from degradation when gel is dissolved at high tempera-

ture in high-salt solution. Buffer DE-B, a chaotropic salt solution, enables DNA fragments more than 100 bp in size to bind selectively to a silica membrane, all impurities are removed by centrifugation.

DNA Purification Kit	Amount of preps	Cat#
DNA Gel Extraction Kit	50	V110610-05
	250	V110610-25



## Mitochondrial / Cytoplasmic Viral DNA Purification Kit

Mitochondrial/Cytoplasmic Viral DNA Purification Kit uses the uniquely designed phase-partition in combination with selective adsorption of DNA on silica membrane to purify mitochondrial/cytoplasmic viral DNA. Purified DNA is free from contaminants and enzyme inhibitors.

DNA Purification Kit	Sample size	Amount of preps	Cat#
Mitochondrial/ Cytoplasmic Viral DNA Purification Kit	2x10 <sup>8</sup> cells/2 g tissues	40	V110510-04
	1x10 <sup>9</sup> cells/10 g tissues	20	V110520-02
	5x10 <sup>9</sup> cells/50 g tissues	100	V110520-10

# DNA Purification Kits

## Total RNA Purification Kit



Total RNA Purification Kit provides a rapid, safe and reliable way to purify total RNA from a wide variety of cells and tissues. The purified total RNA is free from contaminants; it is mainly full-length and suitable for Northern, Dot or Slot Blotting, RNA protection assay, DNA microarray-based analysis, polyA+ RNA purification, reverse transcription and in vitro translation. No phe-

nol/chloroform extraction, no use of ethidium bromide, no CsCl density gradient ultracentrifugation are applied during purification. The procedure is based on the guanidine iso-thiocyanate lysis of the cells with subsequent sequential removal of proteins, polysaccharides and DNA with unique the two-phase system.

RNA Purification Kit	Sample size	Cat#
Total RNA Purification Kit	4x10 <sup>8</sup> cells/4 g tissues	V110210-04
	8x10 <sup>8</sup> cells/8 g tissues	V110210-08

## Parallel Genomic DNA & RNA Purification Kit

Parallel Genomic DNA & RNA Purification Kit provides a rapid way to obtain pure RNA and genomic DNA from the same sample. The purification technique is based on the guanidine iso-thiocyanate lysis of the cells with

subsequent two-phase removal of proteins and polysaccharides. DNA and RNA are separated on the next step with unique two-phase system.

DNA/RNA Purification Kit	Sample size	Cat#
Parallel Genomic DNA & RNA Purification Kit	2.5x10 <sup>8</sup> cells/2.5 g tissue	V110250-25
	5x10 <sup>8</sup> cells/5 g tissue	V110250-50

## Universal DNA Purification Kit

The kit contains all necessary components for simple, economic and convenient DNA purification from such biological samples as blood, urine, cell suspensions, homogenized solid tissues etc. The method based on guanidineisothiocyanate cell lysis with the subsequent DNA absorption on the specially prepared glass powder followed by elution with water. No phenol or chloroform is used for DNA purification.

DNA purified by the kit is an excellent substrate for enzymatic reactions - restriction endonuclease digestion, PCR, dideoxy sequencing etc.

The kit is not recommended for experiments with extremely low amounts of biomaterial.

Each kit contains all components for 100 (500) purifications of DNA from 20-50 mg of tissue or from 100-150 microliters of liquid biosample (blood, urine, cell suspension etc.).

### Kit for DNA purification

Cat#	Pack Size
501001	1 kit for 100 purifications
501005	1 kit for 500 purifications